**In the Claims**

Please cancel claims 1-35 without prejudice and without disclaimer. Applicants reserve the right to refile the claims in a continuing application.

This Listing of the Claims will replace all prior versions. No new matter has been added or introduced by these amendments to the claims.

**LISTING OF THE CLAIMS**

1-35. (canceled)

36. (New) An isolated polypeptide comprising SEQ ID NO:2.

37. (New) An isolated polypeptide that is at least 95% identical to corresponding consecutive amino acids of SEQ ID NO:2 and exhibits GIP antagonist activity.

38. (New) A GIP-specific antagonist comprising the amino acid sequence of SEQ ID NO:2.

39. (New) A GIP-specific antagonist consisting of a polypeptide having the amino acid sequence of SEQ ID NO: 2 .

40. (New) The polypeptide of claim 36 wherein a neutral amino acid selected from the group consisting of amino acids at position 1,6,7,11, 17, 20, 21 and 22 from SEQ ID NO:2 is replaced with a different neutral amino acid.

41. (New) The polypeptide of claim 37 wherein the neutral amino acid is selected from the group consisting of valine, proline, leucine, isoleucine, glycine, and alanine.

42. (New) The polypeptide of claim 36 wherein the aspartic acid at position 3, 9 or 15 of SEQ ID NO: 2 is replaced with glutamic acid.

43. (New) The polypeptide of claim 36 wherein the aspartic acid at positions 3, 9 and 15 of SEQ ID NO:2 is replaced with glutamic acid.

44. (New) The polypeptide of claim 36 wherein the aspartic acid at two of positions 3, 9 and 15 of SEQ ID NO:2 is replaced with glutamic acid.

45. (New) The polypeptide of claim 36 wherein histidine at position 12 of SEQ ID NO:2 is replaced with arginine or lysine.

46. (New) A method for reducing glucose absorption in a mammalian intestine, comprising administering to a mammal in need thereof, an effective amount of a pharmaceutical composition comprising the isolated polypeptide of claim 36.

47. (New) The method of claim 46 wherein reducing glucose absorption in the mammalian intestine improves glucose tolerance.

48. (New) The method of claim 46 wherein the mammalian intestine is human.

49. (New) An isolated antibody capable of binding to an antigen comprising the amino acid sequence of SEQ ID NO:2.

50. (New) The antibody of claim 49 identified as a monoclonal antibody.

51. (New) A composition comprising the polypeptide of claim 36 in a pharmaceutically acceptable carrier.

52. (New) A composition comprising the antibody of claim 49 in a pharmaceutically acceptable carrier.

53. (New) The composition of claim 51 further comprising an inert pharmaceutical excipient selected from the group consisting of sweetening, flavoring, coloring, dispersing, disintegrating, binding, granulating, suspending, wetting, preservative and demulcent agents.

54. (New) The antibody of claim 49 wherein the antibody is lyophilized.

55. (New) The polypeptide of claim 36 wherein the polypeptide is lyophilized.

56. (New) A method of reducing postprandial insulin levels in a subject, comprising administering to said subject an effective amount of a pharmaceutical composition comprising the polypeptide of claim 36.

57. (New) A method of inhibiting GIP binding to GIP receptor in a subject, comprising administering to said subject an effective amount of the composition of claim 51.

58. (New) An isolated polypeptide comprising a contiguous amino acid sequence from position 4-24 of SEQ ID NO:2.

59. (New) An isolated polypeptide that is at least 95% identical to corresponding consecutive amino acids of the polypeptide of claim 58 and exhibits GIP antagonist activity.

60. (New) A GIP antagonist comprising the amino acid sequence from positions 4-24 of SEQ ID NO:2.

61. (New) A GIP antagonist consisting of a polypeptide having the amino acid sequence from position 4-24 of SEQ ID NO: 2 .

62. (New) The polypeptide of claim 58 wherein a neutral amino acid selected from the group consisting of amino acids at position 1,6,7,11, 17, 20, 21 and 22 from SEQ ID NO:2 is replaced with a neutral amino acid.

63. (New) The polypeptide of claim 62 wherein the neutral amino acid is selected from the group consisting of valine, proline, leucine, isoleucine, glycine, and alanine.

64. (New) The polypeptide of claim 58 wherein the aspartic acid at position 3, 9 or 15 of SEQ ID NO: 2 is replaced with glutamic acid.

65. (New) The polypeptide of claim 58 wherein aspartic acid at positions 3,9 and 15 of SEQ ID NO:2 is replaced with glutamic acid.

66. (New) The polypeptide of claim 58 wherein the aspartic acid at two of positions 3, 9 and 15 of SEQ ID NO:2 is replaced with glutamic acid.

67. (New) The polypeptide of claim 58 wherein histidine at position 12 of SEQ ID NO:2 is replaced with arginine or lysine.

68. (New) A method for reducing glucose absorption in mammalian intestine, comprising administering to a mammal in need thereof, an effective amount of a pharmaceutical composition comprising the isolated polypeptide of claim 58.

69. (New) The method of claim 68 wherein reducing glucose absorption in the mammalian intestine improves glucose tolerance.

70. (New) The method of claim 68 wherein the mammalian intestine is human.

71. (New) An isolated antibody capable of binding to an antigen comprising the contiguous amino acid sequence from position 4-24 of SEQ ID NO:2.

72. (New) The antibody of claim 71 identified as a monoclonal antibody.

73. (New) A composition comprising the polypeptide of claim 58 in a pharmaceutically acceptable carrier.

74. (New) A composition comprising the antibody of claim 71 in a pharmaceutically acceptable carrier.

75. (New) The composition of claim 73 further comprising an inert pharmaceutical excipient selected from the group consisting of sweetening, flavoring, coloring, dispersing, disintegrating, binding, granulating, suspending, wetting, preservative and demulcent agents.

76. (New) The antibody of claim 71 wherein the antibody is lyophilized.

77. (New) The polypeptide of claim 58 wherein the polypeptide is lyophilized.

78. (New) A method of reducing postprandial insulin levels in a subject, comprising administering to said subject an effective amount of a pharmaceutical composition comprising the polypeptide of claim 58.

79. (New) A method of inhibiting GIP binding to GIP receptor in a subject, comprising administering to said subject an effective amount of the composition of claim 74.

80. (New) A method for reducing glucose absorption in a mammalian intestine, comprising administering to a mammal in need thereof, an effective amount of a pharmaceutical composition comprising the isolated polypeptide of claim 36 and the isolated polypeptide of claim 58.

81. (New) The method of claim 80 wherein reducing glucose absorption in the mammalian intestine improves glucose tolerance.

82. (New) The method of claim 80 wherein the mammalian intestine is human.

83. (New) A composition comprising the polypeptide of claim 36 and claim 58 in a pharmaceutically acceptable carrier.

84. (New) A composition comprising the antibody of claim 49 and claim 71 in a pharmaceutically acceptable carrier.

85. (New) The composition of claim 83 further comprising an inert pharmaceutical excipient selected from the group consisting of sweetening, flavoring, coloring, dispersing, disintegrating, binding, granulating, suspending, wetting, preservative and demulcent agents.

86. (New) A method for reducing postprandial insulin levels in a subject, comprising administering to said subject an effective amount of a pharmaceutical composition comprising the polypeptide of claim 36 and claim 58.

87. (New) A method for inhibiting GIP binding to GIP receptor in a subject, comprising administering to said subject an effective amount of a composition comprising the polypeptide of claim 36 and claim 58.

88. (New) A method of inhibiting GIP binding to GIP receptor in a subject comprising administering the antibody of claim 49 in a pharmaceutically acceptable carrier.

89. (New) A method of inhibiting GIP binding to GIP receptor in a subject comprising administering the antibody of claim 49 and claim 71 in a pharmaceutically acceptable carrier.